Appl. No. 09/760●●7
Amdt. dated: Feb●●ry 24, 2004
Reply to Office Action of September 24, 2003

●

REMARKS

Claims 1 to 23 were pending at the time of final examination. Claims 1 to 5, 10 to 15, and 20 to 23 stand rejected as anticipated. Claims 6 to 9 and 16 to 19 stand rejected as obvious.

Claims 1, 11 and 21 are amended to make it clear that a bitmap is being compared with the bitmaps stored in a cache. When the claims were construed as required by the MPEP in view of this specification, the added language was inherent in the original claims. Accordingly, this amendment only calls out the inherent property and so should not change the scope of the claims.

Claims 3, 4, 8, 9, 13, 14, 18, 19, and 23 correct informalities. Since there were no outstanding § 112 rejections against these claims, the amendments do not affect the patentability of these claims.

Claims 1 to 5, 10 to 15, and 20 to 23 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,592,594 to Cahoon, hereinafter Cahoon.

Applicant respectfully continues to traverse the anticipation rejection of Claim 1.
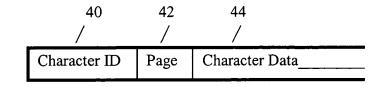
The MPEP requires that for an anticipation rejection

"The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

MPEP § 22131, 8th Ed., Rev. 1, p 2100-70, (Feb 2003). The MPEP states "The identical invention must be shown," for an anticipation rejection.

Appl. No. 09/760,○○7
Amdt. dated: Feb○○ry 24, 2004
Reply to Office Action of September 24, 2003

Fig. 2 of Cahoon is presented below:

Character ID	Page	Character Data

40 42 44

Cahoon taught:

Character data is stored in the form shown in FIG. 2. Each character record in character cache 26 includes a character ID field 40 which is a unique identifier that enables a search routine to determine whether the identified character is or is not stored within character cache 26. A further field area 42 includes a page designation that indicates the highest page number of pages being processed within printer 10 which will require character data 44. Character data 44 may be either full character raster data or may be outline data which is yet to be rasterized. It is preferred that the character data in field 44 be fully rasterized data.

Cahoon, Col. 2, lines 57-67.

Cahoon explained that " to be rasterized" is "to be 'rasterized' into a bit map." (Cahoon, Col. 1, line 21.) Thus, the rasterized data in character data field 44 of Fig. 2 is bit map data based upon the interpretation supplied by Cahoon.

Cahoon does not teach comparing the bit map data in character data field 44, but rather:

Each character is identified by a unique identifier (ID) value. The printer **searches** the cache memory **only by ID value** to determine the presence of a character in the cache. (Emphasis added.)

Cahoon, Col. 1, lines 55 to 57.

Appl. No. 09/760␣␣7
Amdt. dated: Feb␣␣ry 24, 2004
Reply to Office Action of September 24, 2003

Thus, Cahoon describes that it is the ID value of field 40 that is searched and not the character data in field 44. The Examiner has failed to cite any teaching in Cahoon that teaches comparing bit map data in field 44 of Cahoon with anything. The general statements cited by the Examiner must be interpreted in view of the express teaching of Cahoon.

In contrast, Applicant's Claim 1 as amended recites, in part,

> comparing a bitmap itself, . . . , with bitmaps stored in a cache;

Claim 1 does not recite a comparison in the abstract, but rather a specific comparison "a bitmap itself . . . with bitmaps." It is the bitmap itself that is compared with the bitmaps and not some independently assigned identifier as in Cahoon. Cahoon teaches away from this invention by comparing character IDs and not the bitmap data in field 44 of Cahoon. Therefore, Cahoon fails to show "The identical invention . . . in as complete detail as is contained in the ... claim," as required by the MPEP. Applicant requests reconsideration and withdrawal of the anticipation rejection of Claim 1.

Applicant respectfully traverses the anticipation rejection of Claims 2 to 5 and 10. Claims 2 to 5 and 10 include the novel features of Claim 1, and so distinguish over Cahoon for at least the same reasons as Claim 1. Applicant respectfully requests reconsideration and withdrawal of the anticipation rejection of Claims 2 to 5 and 10.

Claims 6 to 9 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,592,594 to Cahoon in view of U.S. Patent No. 5,515,081 to Vasilik. In the original rejection, the Examiner stated in part:

> . . .Vasilik **discloses** (emphasis in original) in the realm of bitmaps being employed for software developments whereby object modules are linked with other object

GUNNISON, McKAY &
HODGSON, L.L.P.
Garden West Office Plaza, Suite 220
1900 Garden Road
Monterey, California 93940
(831) 655-0880
Fax (831) 655-0888

- 9 -   SERIAL NO. 09/760,637

Appl. No. 09/760█ █7
Amdt. dated: Feb█ █ry 24, 2004
Reply to Office Action of September 24, 2003

modules similar to the linked list data structure having length elements.

Applicant continues to traverse the obviousness rejection. In justifying the continued rejection, the Examiner stated in part:

> the specification on page 6, in lines 5-37 details . . . one embodiment a unique identifier to a bit map; another embodiment details multiple appearance of an image being stored only once conserving space; use of this unique identifier for retrieval from the cache . . .

Claim 6 recites:

> the cache comprises a linked list data structure having length elements.

Thus, the cache includes a linked list data structure with length elements. A linked list data structure of length elements is not the "unique identifier" cited by the Examiner as forming a basis for continuing the rejection.

Applicant first notes that the Examiner has cited no teaching of a linked list in Vasilik but rather references a prior art description of a linker that is a tool used to generate an executable program module. Vasilik explicitly stated "The Resource linker 294 takes the compiled resources and links them with the executable program(s) 265 . . . " (Vasilik, Col. 5, lines 33 to 34.) It is not clear from the Examiner comments in the original rejection, or in continuing the rejection that the Examiner makes any distinction between "a linker" and "a linked list." A failure to make a distinction is clear error.

The Examiner goes on to state "Cahoon deals with cache in the realm of bitmap or character cache whereas Vasilik teaches the advantage afforded by encoding the size, position, mask, and ID into the actual bitmap resources itself." While these

statements, on their face are not incorrect, they fail to explain or teach why one of skill would pick particular pieces from Vasilik and how those pieces would be used in Cahoon.

The MPEP puts specific requirements on such modifications. First, the MPEP directs:

FACT THAT REFERENCES CAN BE COMBINED OR MODIFIED IS NOT SUFFICIENT TO ESTABLISH *PRIMA FACIE* OBVIOUSNESS

> The mere fact that references <u>can</u> be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990

MPEP §2143.01, Rev. 1, p. 2100-126 (Feb. 2003).

Vasilik is directed to "multiple bitmap images . . . encoded into a single 'master bitmap.'" (Vasilik, Col. 2, line 66 to Col. 3, line 2.) Vasilik also stated "by encoding the size, position, mask(if any), and ID into the actual bitmap itself, the present invention provides a flexible system for storing and processing multiple images, <u>all within a single bitmap.</u>" (Vasilik, Col. 3, lines 30 to 33.) Thus, size is encoded in the bitmap so that all the bitmaps can be included within a single master bitmap.

Vasilik is not concerned with a cache structure, but rather a way to encode multiple bitmaps in a single master bitmap so that the individual bitmaps can be later decoded. Note the space savings come from encoding multiple bitmaps into a single master bit map. See Col 8, lines 20 to 52. Therefore, if the Examiner wants to use the space savings of Vasilik, it must be used in conjunction with the single master bitmap containing multiple bitmaps. In fact, the Examiner

GUNNISON, McKAY &
HODGSON, L.L.P.
Garden West Office Plaza, Suite 220
1900 Garden Road
Monterey, California 93940
(831) 655-0880
Fax (831) 655-0888

- 11 -   SERIAL NO. 09/760,637

motivation for modifying Cahoon based upon Vasilik was "space savings are realized."

Thus, to achieve the space saving, as taught by Vasilik, the Examiner must somehow use the master bit map of Vasilik with a linked list of Cahoon. However, it appears that the Examiner ignores the teaching of Vasilik with respect to what is required to achieve the space savings, and extracts a single bitmap with the size encoded. This goes against the above quoted directions of the MPEP, because the modification is not supported by Vasilik.

Despite the lack of motivation to select the cited piece of Vasilik, the Examiner combines this piece, a bit map with the size encoded, with a part of Cahoon. The Examiner stated "Cahoon already describes a data structure employed by character caching procedure in a doubly linked character list (col. 3, lines 33-67; col. 4, lines 1-62). Thus, apparently, the Examiner wants to use a single bitmap from Vasilik with the size encoded with the linked list of Cahoon to suggest the invention of Claim 6.

However, the linked list cited by the Examiner is used to determine which element to remove from the cache of Cahoon. Specifically, Cahoon taught:

> Next, character caching procedure 23 is called and implements a character replacement algorithm which determines if there is room to put new character data in character cache 26 and if not, to make room in character cache area 26 for the new character data.

Cahoon, Col. 3, lines 19 to 23.

> A further data structure employed by character caching procedure 23 is doubly linked character list 30 maintained in RAM 24. Linked character list (LCL) 30 comprises a listing of character IDs from the most recently used character to the least recently used character. Each time a character is used, it's character ID 40 is moved to the top of LCL 30 and all other

character ID's are moved down. Character caching
procedure 23 employs LCL 30 to determine which character
data is to be removed from character cache 26.

Cahoon, Col. 3, lines 33 to 41.

The linked character list of Cahoon has nothing to do with
lengths or length elements and is instead a list of character
IDs linked based upon usage. Moreover, the elements of the
list are not length elements but a list of character IDs.
Replacing the character IDs with sizes encoded in the bitmaps
of Vasilik would require a modification of Cahoon. Each
character ID is unique according to Cahoon, but encoded sizes
of bitmaps, as selectively extracted from Vasilik, are not
necessarily unique. The Examiner has failed to explain how the
encoded size information of Vasilik would be used in the linked
list of Cahoon to determine the least recently used bitmap.
The MPEP requires:

THE PROPOSED MODIFICATION CANNOT CHANGE THE PRINCIPLE OF OPERATION OF A REFERENCE

If the proposed modification or combination of the prior
art would change the principle of operation of the prior
art invention being modified, then the teachings of the
references are not sufficient to render the claims *prima
facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349
(CCPA 1959)

MPEP §2143.01, Rev. 1, p. 2100-127 (Feb. 2003).

Modifying the linked character list of Cahoon to include
the encoded sizes of Vasilik changes the principle of operation
of Cahoon. Therefore, the "teachings of the references are not
sufficient to render the claims *prima facie* obvious," based
upon the above quotation from the MPEP.

Moreover, Cahoon worked for the intended purpose. The Examiner has cited no teaching that modification of Cahoon was necessary. As noted above, the size advantage of Vasilik was based upon packing all the bitmaps into a single bitmap. The motivation relied upon by the Examiner fails to explain how a linked list based upon usage in Cahoon would be modified to include sizes. Therefore, the rejection fails to satisfy this requirement of the MPEP at multiple levels.

Finally, even if the Examiner's characterization of the teachings of Vasilik is correct, the characterization fails to correct the deficiency in the primary reference as noted above with respect to Claim 1 and incorporated herein by reference. Therefore, Claim 6 is patentable over the combination of references. Applicant respectfully requests reconsideration and withdrawal of the obviousness rejection of Claim 6.

Claims 7 to 9 depend from Claim 6 and so distinguish over the combination of references for at least the same reason as Claim 6. Applicant respectfully requests reconsideration and withdrawal of the obviousness rejection of Claims 7 to 9.

Claim 11 stands rejected as anticipated for the same reason as Claim 1. Claim 11 includes the language quoted above with respect to Claim 1. Therefore, the above remarks concerning Claim 1 are directly applicable to Claim 11 and are incorporated herein by reference. Applicant requests reconsideration and withdrawal of the anticipation rejection of Claim 11.

Applicant respectfully traverses the anticipation rejection of Claims 12 to 15 and 20. Claims 12 to 15 and 20 include the novel features of Claims 11, and so distinguish over Cahoon for at least the same reasons as Claim 11. Applicant respectfully requests reconsideration and withdrawal of the anticipation rejection of Claims 12 to 15 and 20.

Claim 16 stands rejected as obvious for the same reason as Claim 6. Claim 16 includes the language quoted above with respect to Claim 6. Therefore, the above remarks concerning

Appl. No. 09/760●●7
Amdt. dated: Fe●●●ry 24, 2004
Reply to Office Action of September 24, 2003

Claim 6 are directly applicable to Claim 16 and are incorporated herein by reference. Applicant requests reconsideration and withdrawal of the obviousness rejection of Claim 16.

Applicant respectfully traverses the obviousness rejection of Claims 17 to 19. Claims 17 to 19 depend from Claim 16 and so distinguish over the combination of references for at least the same reason as Claim 16. Applicant respectfully requests reconsideration and withdrawal of the obviousness rejection of Claims 17 to 19.

Claim 21 stands rejected as anticipated for the same reason as Claim 1. Claim 21 includes the language quoted above with respect to Claim 1. Therefore, the above remarks concerning Claim 1 are directly applicable to Claim 21 and are incorporated herein by reference. Applicant requests reconsideration and withdrawal of the anticipation rejection of Claim 21.

Applicant respectfully traverses the anticipation rejection of Claim 22. Claim 22 includes the novel features of Claim 21, and so distinguishes over Cahoon for at least the same reasons as Claim 21. Applicant respectfully requests reconsideration and withdrawal of the anticipation rejection of Claim 22.

In the anticipation rejection of Claim 23, the Examiner stated "Regarding claim 23, it is similar in scope to claim 4 above and is rejected under the same rationale." In the rejection of Claim 4, the Examiner originally stated:

> . . . Cahoon **discloses** (emphasis in original) wherein said method further comprises: including the unique identifier of a bitmap stored in the cache in a file (character data structure, Figure 2...character data is stored in the form...col. 2, lines 58-65) sent to an output device(printer 10).

In continuing the rejection, the Examiner stated:

. . . cache structure stores file structure and thus any operations or processing being performed at the cache level corresponds to a file structure being manipulated.
. . . .Cahoon suggests at printer operation's commencement, the operation system allocating memory and making adjustment for different font sizes which would accommodate width and length element associated with bitmap.

Applicant respectfully traverses the anticipation rejection of Claim 23. The Examiner's attention is called to the above quotation from the MPEP with respect to the requirements for an anticipation rejection.

Claim 23 recites in part

a cache section including at least one bitmap associated with a unique identifier; and
a data section including a plurality of occurrences of the one unique identifier associated with the at least one bitmap in the cache section, wherein each occurrence of a the unique identifier is associated with a specified position, and for each occurrence of the unique identifier in the data section, an image represented by the bitmap associated with the unique identifier is displayed on an output device in the specified position.

As noted above, "The identical invention must be shown in as complete detail as is contained in the ... claim" must be described by Cahoon. In continuing the rejection, the Examiner made the generalized statement "cache structure stores file structure" that might be true in some instances. However, Cahoon describes the structure of Fig. 2 as a "character record" and not a file.

Moreover, even if cache 26 is taken as the cache section of a file, the Examiner has failed to explain where the data section as recited in Claim 23 is taught by Cahoon. Neither the original rejection as quoted above nor the justification for continuing the rejection cites any teaching in Cahoon of "a data section including a plurality of occurrences of at least one unique identifier . . . ." Each character ID in the cache of

Cahoon is unique as described by Cahoon (See Col. 2, line 59) and so the examiner cannot segregate parts of the character record to arrive at the data section as recited in Claim 23.

The action of the printer operating system in setting the size of memory for the cache of Cahoon is simply unrelated to the elements recited in Claim 23. Similarly, the original rejection states the cache data of Cahoon is sent to a "printer 10." Again, the cache is shown as being in "printer 10" and so this statement is inconsistent with the teachings of the reference. The Examiner has failed to show any file with the format recited in Claim 23. Therefore, the Examiner has failed to establish that Cahoon teaches exactly the structure recited in the Claim 23. Applicant requests reconsideration and withdrawal of the anticipation rejection of Claim 23.

Claims 1 to 23 remain in the application. Claims 1, 3, 4, 8, 9, 11, 13, 14, 18, 19, 21 and 23 have been amended. For the foregoing reasons, Applicant respectfully requests allowance of all pending claims. If the Examiner has any questions relating to the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicant.

CERTIFICATE OF MAILING
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on February 24, 2004.

Respectfully submitted,

February 24, 2004

Attorney for Applicant(s)   Date of Signature

Forrest Gunnison
Attorney for Applicant(s)
Reg. No. 32,899
(831) 655-0880